



**JOINT MANAGEMENT PLAN REVIEW  
DRAFT ACTION PLAN:  
Ecosystem Protection – Marine Protected Areas  
Revised: 4/4/03**

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***Please Note:** The MBNMS and the Sanctuary Advisory Council have tasked the management plan working groups with development of draft action plans that characterize the issue or problem and identify strategies and activities that address the issue. The working groups will develop these strategies and activities as they meet over several months. With this goal in mind, the progress of the group, the decisions, areas of agreement will be outlined in a progressively developed action plan identifying draft goals, issue characterizations, and strategies and activities. Members of the group as well as other interested parties should look to this draft action plan as it develops as way of tracking the group's progress and decisions.*

**OVERVIEW:**

Marine Protected Areas (MPAs) are a management tool that may fully restrict harvesting of marine life within a designated geographic area or may allow take of selected species. Scientific research has indicated that carefully crafted MPAs can be effective tools for conservation of biodiversity and habitats. MPAs may be used as a means to restore degraded areas and as a precautionary tool to conserve a range of representative habitats and biodiversity. Well-designed MPAs generally contain higher species diversity, more abundant species, and larger fish within their boundaries relative to impacted areas of similar habitat outside the reserve. These larger fish produce many more young than do smaller fish. MPAs are one of many useful tools that can be used to prevent, slow, or reverse negative habitat and ecosystem changes within the Sanctuary. The Sanctuary Program will also consider other management tools that may enable the Program to meet its conservation goals.

The National Marine Sanctuary Program received many comments during the scoping period of the Joint Management Plan Review (JMPR) requesting increased protection of the ecosystem by taking the lead in implementing a network of MPAs in State and Federal waters. The Sanctuary Program also received many comments asking that regulatory authority on fishing and MPAs remain with existing State and Federal agencies, and that any consideration by the Sanctuary of MPAs should be based on consensus with the fishing industry. The Sanctuary Program believes that any consideration of MPAs should and will be a joint effort with the participation of many diverse stakeholders, including strong participation of the fishing community to tap into their extensive knowledge and to



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consider socioeconomic impacts of alternative MPA designs, as well as participation from other agencies, scientists, environmental organizations and the public.

Where MPA processes led by other agencies are underway, such as the Marine Life Protection Act process led by the California Department of Fish and Game, MBNMS staff will be active participants in that process. Although the Sanctuary Program would bring its extensive expertise in ecosystem protection and multi-stakeholder approaches to the issue of MPAs, our initial preference in central California is that the actual designation of any MPAs in state waters be done under the regulatory authority of the California Department of Fish and Game. The Sanctuary Program will participate in and evaluate the outcome of the MLPA process to assess whether it can adequately address the ecosystem and habitat conservation goals of the Program. In Federal waters, there is no similar multistakeholder process underway to evaluate the potential for MPAs, although the Pacific Fisheries Management Council (PFMC) has previously conducted a conceptual analysis of MPAs. In Federal waters, the Sanctuary would work with NMFS, the Pacific Fisheries Management Council, the fishing community, environmental organizations, and others to conduct a detailed multistakeholder evaluation of the potential for MPAs in MBNMS. The MBNMS has also been actively working with the industry-led Alliance of Communities for Sustainable Fisheries in their evaluation of MPAs, and will continue sharing information and seeking common ground with that group.

### **WORKGROUP PLANNING:**

To address the issue of properly protecting the Sanctuary's marine ecosystem via MPAs, the MBNMS has developed a Workgroup of the Sanctuary Advisory Council to provide guidance on several aspects of MPAs. Since the MBNMS is a "marine protected area" itself, this Action Plan is using the term Special Marine Protected Areas to distinguish these MPAs that might limit harvest from the MBNMS itself.

The Workgroup was asked to outline the framework for providing input to CDFG on the design and implementation of MPAs under the MLPA within the MBNMS region, evaluating the success of that effort and potential the need for further action. The Workgroup also was asked to develop a framework to address the need for, and if necessary, general criteria for and types of special MPAs in the federal waters of the Sanctuary.

The framework describes the process, goals and criteria for effective special MPAs and provides recommendations for an action plan in the revised Sanctuary management plan. Although the revised management plan itself will not specify exact locations for special MPAs, the Sanctuary Program will continue the planning effort in the future with the Workgroup to conduct additional evaluations using the framework document as a guide. Much detailed work remains to conduct a thorough evaluation of the issue, including identification of specific habitats and ecological processes to be protected, identification of potential and existing threats, development of site-specific goals, consideration of design



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criteria which incorporate biological and socioeconomic issues, integration with other management efforts, and articulation of monitoring, education and enforcement needs.

The Workgroup refined a draft list of future work topics which address these and other issues in the special MPA plan during its meetings in the winter and spring of 2003. This list, shown below, will provide the basis for a longer-term work program for implementation, with continued involvement by the Workgroup.

**GOAL OF A SPECIAL MARINE PROTECTED AREAS PLAN:** The Sanctuary's goal for special MPAs is best stated by language directly from the National Marine Sanctuary Act that states one of the overarching goals of the Sanctuary program. That goal is to "Maintain the natural biological communities in the national marine sanctuaries, and to protect, and where appropriate, restore and enhance natural habitats, populations and ecological processes." In addition, an important goal for special MPAs in the MBNMS is to design them in such a way that they allow for the long-term continuation of sustainable fishing practices in the Sanctuary, as fisheries are a key cultural and economic component of the region.

### **STRATEGIES OF THE PLAN:**

A list of strategies to be addressed in the framework plan is included below.

#### **STRATEGY MB –MPA1 IDENTIFY HABITATS AND ECOSYSTEMS TO BE PROTECTED**

##### **ACTIVITIES:**

- 1) Include range of representative habitat type- e.g. hard bottom, soft bottom, kelp forest, pelagic, rocky intertidal, estuarine, etc.
- 2) Identify and preserve key ecological interactions, including predator-prey relationships, migratory patterns, life history stages, and the role of biogenic habitat (e.g. kelp)
- 3) Identify potential or existing threats to these habitats, resources or interactions
- 4) Identify resource or habitat-specific objectives for individual special MPAs and/or network/collection of special MPAs
- 5) Include mix of degrees of habitat health ranging from areas which are minimally disturbed set aside for protection, to historically productive, currently underused habitats set aside to allow recovery



**STRATEGY MB –MPA2**  
**IDENTIFY AND CONSIDER GENERAL DESIGN CRITERIA**

**ACTIVITIES:**

Biological and physical factors

- 1) Consider biological factors identified above in Strategy MPA1
- 2) Consider proximity to ecological “hotspots”
- 3) Evaluate physical oceanographic factors such as currents, upwelling, etc.
- 4) Consider biological relationships between State and Federal waters for a network/collection of special MPAs

Human use patterns

- 5) Evaluate distribution of human activities on the water
- 6) Evaluate how locations and distances may impact different user groups and local communities
- 7) Consider distances from port and safety issues
- 8) Evaluate potential impacts of displacement of fishing effort to other areas
- 9) Consider access by other target users, such as divers, kayakers, shore fishermen, researchers
- 10) Map location of existing small reserves, closed areas, and other types of MPAs
- 11) Consider locations of other types of human threats—e.g water quality, landslides, vessel traffic, MPWC

Size and scale

- 12) Ensure that special MPAs are sized appropriately to meet objectives, considering biological and socioeconomic factors
- 13) Consider distances between special MPAs and between types of special MPAs
- 14) Evaluate the need for a network of special MPAs as opposed to individually sited special MPAs
- 15) Determine appropriate scale of a network
- 16) Incorporate variability in special MPA design to improve effectiveness evaluations

Implementation issues

- 16) Consider proximity and ability to enforce
- 17) Consider ability to monitor for effectiveness evaluation

**STRATEGY MB –MPA3**  
**EVALUATE OPTIONS FOR TYPES OF USE**

**ACTIVITIES:**

- 1) Consider mix of options which may restrict various types of extractive and non-



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- extractive activities at selected sites in a special MPA network
- 2) Consider relationship between MLPA categories and Sanctuary designations

### **STRATEGY MB –MPA4 INTEGRATE WITH OTHER MANAGEMENT TOOLS**

#### **ACTIVITIES:**

- 1) Identify and evaluate other existing or planned ecosystem, fishery, or land-based management tools
- 2) Identify and evaluate gaps, limits and constraints of existing tools
- 3) Evaluate means to effectively integrate and coordinate special MPAs with these tools to leverage and strengthen efforts and avoid duplication
- 4) Use special MPAs to help leverage agency resources to address multiple threats to key sites, including land-based activities
- 5) Consider possible synergies between land-based protected areas (e.g. state parks) and adjacent special MPAs for staffing, education, enforcement or research, or reduction of land-based threats

### **STRATEGY MB –MPA5 CONSIDER SOCIOECONOMIC IMPACTS AND ECONOMIC MITIGATION MEASURES**

#### **ACTIVITIES:**

- 1) Identify types of socioeconomic analyses to assist in the design and evaluation of biologically effective special MPAs which will allow continuation of sustainable fishing practices and sustainable communities
- 2) Prioritize studies needed and ensure their implementation, including those required by NEPA
- 3) Evaluate user groups and ports affected, short and long-term effects, and potential for buffering or reducing negative effects
- 4) Consider economic uses that may be improved by designation of reserves
- 5) Evaluate how the community is affected, including cultural and economic sustainability of both consumptive and non-consumptive factors and values
- 6) Consider social values of a wide variety of different people in evaluating special MPAs
- 7) Work with NOAA and Department of Commerce to expand/develop economic mitigation programs for users which may be impacted
- 8) Develop system to promote continued involvement of communities in the process



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### **STRATEGY MB –MPA6 DEVELOP EFFECTIVE ENFORCEMENT AND COMPLIANCE PROGRAM**

#### **ACTIVITIES:**

- 1) Identify components of an effective enforcement program and implementation mechanisms to provide presence on the water and in the air
- 2) Develop partnerships and cooperative interagency enforcement plans
- 3) Ensure adequate knowledge by enforcement officers
- 4) Work to facilitate compliance via tools such as GPS systems
- 5) Enlist community participation in special MPA management and enforcement to maximize cost-effectiveness of enforcement program and enhance compliance

### **STRATEGY MB –MPA7 DEVELOP EDUCATION AND OUTREACH PROGRAM**

#### **ACTIVITIES:**

- 1) Identify target audiences and develop components of an effective education and outreach program
- 2) Conduct regional workshops to share information and gather input from fishing leaders and the community after special MPA design criteria are determined by multistakeholder group
- 3) Conduct regional workshops to share information and gather input from fishing leaders and the community after initial special MPA boundaries are drafted by multistakeholder group
- 4) Consider ongoing education potential of individual reserve locations
- 5) Link efforts to general education strategies on fisheries (a separate working group) and to MBNMS regional education and outreach plans
- 6) Integrate education with enforcement and research

### **STRATEGY MB –MPA8 DEVELOP RESEARCH AND MONITORING PROGRAM**

#### **ACTIVITIES:**

- 1) Design and conduct biological effectiveness evaluations linked to specific goals of special MPA
  - a) Evaluate biological changes within and outside of special MPAs
  - b) Include comparisons to adequate control sites
  - c) Distinguish between natural and anthropogenic changes
  - d) Evaluate potential spillover effect to local populations



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- 2) Evaluate human activities and changes relative to specific goals of special MPA
  - a) Assess consumptive and nonconsumptive use patterns inside and outside special MPAs
  - b) Determine effects of scientific monitoring
  - c) Include observer program on research and fishing vessels
  - d) Monitor socioeconomic changes in user groups after special MPAs are established
- 3) Coordinate monitoring and data distribution
  - a) Coordinate special MPA monitoring with other biological monitoring in the region and link to SIMoN
  - b) Involve fishermen and divers in monitoring activities
  - c) Coordinate with other sanctuaries conducting special MPA monitoring
  - d) Package and distribute readily understood monitoring information and effectiveness evaluations to decision-makers, fishermen and public

### **STRATEGY MB –MPA9 DEVELOP TIMING STRATEGIES REGARDING PHASING AND EFFECTIVENESS EVALUATIONS**

#### **ACTIVITIES:**

- 1) Evaluate potential benefits and disadvantages of phasing
- 2) If phasing is considered appropriate, develop criteria for establishing a reasonable first phase
- 3) Determine criteria for frequency of effectiveness evaluation of special MPAs, linking criteria to site-specific goals
- 4) Establish criteria for when evaluations should lead to adaptive management or changes in MPAs based on improved knowledge

*Most of the above categories apply to consideration of special MPAs in both state and federal waters. In addition, some specific categories to be addressed for federal or state processes are listed below.*





**STRATEGY MB –MPA10**  
**OUTLINE PROCESS AND CRITERIA TO EVALUATE AND DESIGN SPECIAL**  
**MPAS IN FEDERAL WATERS**

**ACTIVITIES:**

- 1) Develop partners during evaluation and design phases:
  - a) Continue multistakeholder workgroup for evaluation and design
  - b) Outline roles and steps for involvement of Sanctuary, NMFS, and PFMC
  - c) Develop partnerships with NMFS and PFMC and consider joint staffing during evaluation and design phases
  - d) Evaluate linking to and coordination with possible PFMC Phase II consideration of reserves
  - e) Ensure coordination with MLPA workgroup considering MPAs in state waters through sharing of information, joint members and possibly joint meetings
- 2) Consider additional design factors for federal waters (beyond those in MPA2 above)
  - a) Define conditions where it is beneficial to extend state MPAs to federal waters, and when separate special MPAs may be more appropriate
  - b) Evaluate type and orientation of extension that may be appropriate across state and federal waters, and consider the benefits and disadvantages of doing so
  - c) Evaluate potential for separate offshore special MPAs focused on biological hotspots correlated with persistent physical and oceanographic features
  - d) Evaluate the persistence of pelagic hotspots over time
  - e) Consider practical feasibility of pelagic closures, including possibility for temporary closures
- 3) Outline options for implementation process--after identification of special MPA needs, feasibility and site-specific goals, evaluate the most appropriate process and agency to implement. Options include:
  - a) PFMC adopts special MPAs under its own statutory authorities, provided the species covered are addressed by a Fishery Management Plan (FMP)
  - b) PFMC is given the opportunity to draft regulations drawing on authorities of the National Marine Sanctuary Act, as outlined in subsection 304 (a)(5) of the Act, allowing it to address species not covered by a FMP
  - c) NOAA prepares the draft regulations drawing on authorities in NMSA.
  - d) Promulgation of regulations under the NMSA would require amendment of the 1992 MBNMS designation document since regulation of fishing activities is not identified as falling within the scope of current or future regulations. As outlined in the 1992 designation document, any future amendment of the designation document to regulate fishing activity would occur in consultation with fishery management agencies, the fishing community, and the public, and would be subject to formal public hearings, EIS preparation, and Congressional notification requirements.





**STRATEGY MB –MPA11**  
**OUTLINE PROCESS AND CRITERIA TO EVALUATE AND DESIGN SPECIAL**  
**MPAS IN STATE WATERS**

**ACTIVITIES:**

- 1) Continue MBNMS participation in MLPA workgroup process to provide Sanctuary perspective, share information, collaborate on development of recommendations, and link to strategies and activities recommended above
- 2) Ensure coordination with workgroup considering MPAs in federal waters through sharing of information, joint members and possibly joint meetings
- 3) Describe evaluation of success of MLPA outcome, including range of acceptable outcomes and timelines for process
- 4) Outline multi-stakeholder alternative process to be used if necessary pending evaluation of success of MLPA process